

AMENDMENTS TO THE CLAIMS

Claim 1 (Currently Amended) A Portable portable electronic device—equipment comprising:

a first manipulator means for supplying a signal for performing a first screen process on an-information displayed on a display-means;

a second manipulator means for supplying a circumferential movement signal for performing a second screen process on the information displayed on the display, said second manipulator means including a ring-shaped manipulator having an inner circumference side, an outer circumference side, and a bottom surface, said second manipulator means for supplying the circumferential movement signal according to said ring-shaped manipulator means; and

a controller means, said controller means controlling for interfacing with said first manipulator means, said second manipulator means, and said the display-means; wherein:

said first manipulator means is arranged at either the inner circumference side or the outer circumference side of said ring-shaped manipulator;

wherein, responsive to the signal supplied input from said first manipulator means, said controller means is operable to perform performs the first screen process of by scrolling a screen displaying the information displayed on the display and selecting a display position; and

responsive to the circumferential movement signal supplied input in a circumferential direction from said second manipulator means, said controller means is operable to perform performs the second screen process, the second screen process being one of a process of scaling up the information, scaling down the information, and switching the a screen of information displayed on the display with the selected display position as a reference.

Claim 2 (Cancelled)

Claim 3 (Currently Amended) The portable electronic equipmentdevice of Claim 1, wherein:

said ring-shaped manipulator is operable to rotate circumferentially; and

said second manipulator means includes a rotatable ring-shaped manipulator, and further

includes a rotation detector detection means for detecting a direction and an amount of rotation of said ring-shaped manipulator second manipulator means.

Claim 4 (Currently Amended) The portable electronic device equipment of Claim 3, wherein:

 said rotation detector detection means is disposed on a bottom face arranged so as to interface with the bottom surface of said ring-shaped manipulator; and

 said rotation detector detection means comprises:

 a ring magnet magnetized according to alternating north and south poles at intervals of an equal angle, and fixed on the bottom surface of said ring-shaped manipulator to a north pole and a south pole alternately at intervals of an equal angle and fixed on the bottom face of said manipulator; and

 a pair of magnetic sensors arranged so as to be opposed to said ring magnet and arranged with a predetermined clearance between said pair of magnetic sensors and said ring magnet; and

 said rotation detector detection means is operable to detect detects movement of said ring magnet above in relation to said pair of magnetic sensors.

Claim 5 (Currently Amended) The portable electronic device equipment of Claim 3, wherein

 said rotation detection means detects a direction and amount of rotation of said second manipulator means; and

 said controller is operable to perform means performs the second screen process according to the detected direction and the amount of rotation of said ring-shaped manipulator a screen process, the screen process being one of sealing up, sealing down, and switching a displayed screen.

Claim 6 (Currently Amended) The portable A portable electronic device equipment of Claim 1, further comprising:

 a circular rubber manipulator having a front and a back;

 a first manipulator means for supplying a signal for performing a first screen process on

information displayed on a display, said first manipulator means arranged to interface with the back of said circular rubber manipulator;

a second manipulator means for supplying a circumferential movement signal for performing a second screen process on the information displayed on the display, said second manipulator means arranged to interface with the back of said circular rubber manipulator; and
a controller, wherein:

said first manipulator means includes a press button and a self-restoring contact opposed to said press button;

said second manipulator means comprises:

a ring-shaped conductive depressing portion; and

a plurality of concentrically disposed second contacts opposed to said ring-shaped conductive depressing portion with a predetermined clearance between said plurality of concentrically disposed second contacts and said ring-shaped conductive depressing portion;

said controller is operable to perform the first screen process by scrolling the information displayed on the display and operable to select a display position according to the signal supplied from said first manipulator means; and

said controller is operable to perform the second screen process, the second screen process being one of a process of scaling up the information, scaling down the information, and switching a screen of information displayed on the display with the selected display position as a reference, according to the circumferential movement signal supplied from said second manipulator means.

~~said circular manipulator includes said first manipulator means and said second manipulator means on a bottom side thereof; and~~

~~said second manipulator means can detect sliding operation of said manipulator in a circumferential direction thereof, and a direction and amount of rotation of said manipulator caused by the sliding operation.~~

Claim 7 (Currently Amended) The portable electronic equipment of Claim 6, wherein:

said controller is operable to perform the first screen process according to an actuation of said self-restoring contact by said press button;

said controller is operable to detect a direction of a circumferential sliding operation of said circular rubber manipulator, and operable to detect an amount of directional rotation of said circular rubber manipulator caused by the circumferential sliding operation; and

said controller is operable to perform the second screen process according to the detected direction and the amount of directional rotation of said circular rubber manipulator.~~said first manipulator means includes a press button and a self restoring contact opposed to said press button; and~~

~~actuation of said self restoring contact by said press button allows the screen on said display means to be scrolled at least vertical and horizontal directions.~~

Claim 8 (Cancelled)

Claim 9 (Cancelled)

Claim 10 (Currently Amended) The portable electronic device equipment of Claim 6, wherein including said first manipulator means is arranged at along an outer circumference of said second manipulator means, and wherein said first manipulator means includes a conductive depressing portion and a first contact opposed to said conductive depressing portion.

Claim 11 (Currently Amended) The portable electronic device equipment of Claim 6, wherein

~~said second manipulator means detects operation in a circumferential direction of said manipulator; and~~

~~said first manipulator means is operable to detect detects operation within the a same plane in a direction different from that of said second manipulator means.~~

Claim 12 (Currently Amended) The portable electronic device equipment of Claim 6, wherein said circular rubber manipulator ~~has~~ includes an indication means for indicating a position of said first manipulator means.

Claim 13 (Currently Amended) The portable electronic device equipment of Claim

1, wherein said first manipulator means is a multi-directional switch operated by one of depressing and tilting.

Claim 14 (Currently Amended) The portable electronic device~~device-equipment~~ of Claim 1, wherein said first manipulator means is a track ball.

Claim 15 (Currently Amended) The portable electronic device~~device-equipment~~ of Claim 1 further comprising an integrated~~built-in~~ display device.

Claim 16 (New) The portable electronic device of Claim 6 further comprising an integrated display device.